



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/707,657	12/30/2003	James Kenneth Aragonces	61765.005012	1656

7590 01/18/2008
General Electric Company
Patrick K. Patnode
GE Global Research Center, Patent Docket Room 4A59
P.O. Box 8, Bldg. K-1
Schenectady, NY 12301

EXAMINER

CRAIG, DWIN M

ART UNIT	PAPER NUMBER
2123	

MAIL DATE	DELIVERY MODE
01/18/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/707,657

Applicant(s)

ARAGONES ET AL.

Examiner

Dwin M. Craig

Art Unit

2123

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 November 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. In view of the Appeal Brief filed on 11/9/2007, PROSECUTION IS HEREBY REOPENED. A new grounds of rejection is set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

(1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,

(2) initiate a new appeal by filing a notice of appeal under 37 CFR 41.31 followed by an appeal brief under 37 CFR 41.37. The previously paid notice of appeal fee and appeal brief fee can be applied to the new appeal. If, however, the appeal fees set forth in 37 CFR 41.20 have been increased since they were previously paid, then appellant must pay the difference between the increased fees and the amount previously paid.

A Supervisory Patent Examiner (SPE) has approved of reopening prosecution by signing below:

A handwritten signature in dark ink, appearing to read 'P. Rodriguez', with a long horizontal flourish extending to the right.

Paul L. Rodriguez SPE AU 2123

Response to Arguments

2. Applicant's arguments, see the Appeal Brief, filed 11/09/2007, with respect to claims 1-24 have been fully considered and are persuasive. The 35 U.S.C. 103(a) rejections of claims 1-24 has been withdrawn.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

3. Claims 1-24 are provisionally rejected on the ground of nonstatutory double patenting over claims 1-8 and 10-36 of copending Application No. 10/707,655. This is a provisional double patenting rejection since the conflicting claims have not yet been patented.

The subject matter claimed in the instant application is fully disclosed in the referenced copending application and would be covered by any patent granted on that copending application since the referenced copending application and the instant application are claiming common subject matter, as follows:

Taking claim 9 of the instant Application in view of claim 24 of U.S. non-provisional Patent Application number 10/707,655 as an example, both claims teach, *baseline modeling*,

storing engine data in a database, processing the engine data into a predetermined format, the engine baseline model relates engine performance variables as a function of engine operating conditions and using the final engine baseline model to perform at least one of monitoring engine status, predicting future engine behavior, diagnosing engine faults, determining engine performance, determining engine quality, and designing new engine systems.

Claim 9 discloses, comparing engine data from a plurality of engines against an engine baseline model, generating engine trends for each of the plurality of engines, identifying correlations between engine trends and various parameters; and calculating for each identified correlation, summary statistics...

Claim 24 of 10/707,655 disclose, building an initial engine baseline model from the processed data using a regression analysis, the initial engine baseline model represented by a plurality of parameter estimates, wherein the regression analysis relates engine performance variables as a function of engine operating conditions; identifying segments relating to related engines; smoothing the parameter estimates for each of the identified related engine segments; building a final engine baseline model from the averaged data using a regression analysis;

Identifying segments related to related engines, teaches and suggests, comparing engine data from a plurality of engines, further, performing a regression analysis is the same as generating engine trends for each of the plurality of engines, identifying correlations between engine trends and various parameters; and calculating for each identified correlation, summary statistics, therefore it would have been obvious, to an artisan of ordinary skill, at the time of the invention to have derived the claimed limitations as disclosed in claim 24 of Application No. 10/707,655, to produce the claimed limitations as taught in claim 9.

Allowable Subject Matter

4. The following is a statement of reasons for the indication of allowable subject matter:

4.1 As regards independent claims 1, 5, 9, 13, 17 and 21, while *Pettigrew* teaches an engine service database and a baseline model of an aircraft engine and Morrison teaches, diagnostics analysis of engine data, **none of these references taken alone or in combination with the prior art of record disclose**, a model diagnostics component that evaluates the performance of the engine baseline model, wherein the model diagnostics component includes, a means for comparing engine data from a plurality of engines as well as a means for generating engine trends for each of the different engines, specifically including;

(claim 1) “a model diagnostics component that evaluates the performance of the engine baseline model, wherein the model diagnostics component includes, means for comparing engine data from a plurality of engines against the engine baseline model; means for generating engine trends for each of the plurality of engines”,

(claim 5) “a model diagnostics component that evaluates the performance of the engine baseline model, wherein the model diagnostics component includes; means for evaluating a subset of the engines used to create the model in time order against the generated baseline; means for generating time-varying trends”,

(claim 9) “evaluating the performance of the baseline model, wherein evaluating the performance of the engine model comprises; comparing engine data from a plurality of engines against the engine baseline model; generating engine trends for each of the plurality of engines”,

(claim 13) “evaluating the performance of the baseline model, wherein evaluating the performance of the engine model comprises; evaluating a subset of the engines used to create the model in time order against the generated baseline; evaluating time-varying system trends”,

(claim 17) “one or more instructions for evaluating performance of the engine baseline, wherein evaluating the performance of the engine baseline model comprises; one or more instructions for comparing engine data from a plurality of engines against the engine baseline model; one or more instructions for generating engine trends for each of the plurality of engines”,

(claim 21) “one or more instructions for evaluating performance of the engine baseline, wherein evaluating the performance of the engine baseline model comprises; one or more instructions for evaluating a subset of engines used to create the model in time order against the generated baseline; one or more instructions for generating time-varying trends”, **in combination with the remaining elements and features of the claimed invention.**

4.2 As regards dependent claims 2-4, 6-8, 10-12, 14-16, 18-20 and 22-24 for at least the reason that they depend upon an allowed base claim.

4.3 It is noted by the Examiner that claims 1-24 are under a double patenting rejection as set for in this office action.

Conclusion

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dwin M. Craig whose telephone number is (571) 272-3710. The examiner can normally be reached on 10:00 - 6:00 M-F.

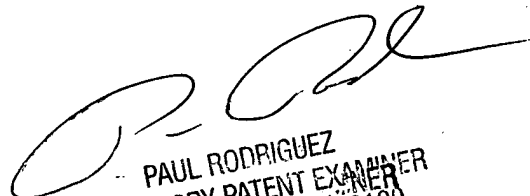
Application/Control Number:
10/707,657
Art Unit: 2123

Page 7

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul L. Rodriguez can be reached on (571) 272-3753. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Dwin McTaggart Craig
AU 2123


PAUL RODRIGUEZ
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100